



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/825,682	04/16/2004	Toshimasa Ikeda	Q81126	8862
65565	7590	02/07/2007		
SUGHRUE-265550			EXAMINER	
2100 PENNSYLVANIA AVE. NW			LONEY, DONALD J	
WASHINGTON, DC 20037-3213				
			ART UNIT	PAPER NUMBER
			1772	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/07/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

## Office Action Summary

Application No.

10/825,682

Applicant(s)

IKEDA ET AL.

Examiner

Donald Loney

Art Unit

1772

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 13 November 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,3-7 and 15-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3-7,15-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on November 13, 2006 has been entered.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 3, 7, 15-17 and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Prophet (5413743).

Prophet discloses a first resin layer 14 laminated to a second resin layer 12. The second resin layer 12 has protruding portions at bond ends of the layer which attach the layers to one another. The space between the layers can be considered the offset portion since it is adjacent (i.e. next to, or at the side of the protruding portion) to the protruding portion as recited in the claims. As shown by the applicant in figure 3, the offset is adjacent (i.e. to the left and right thereof) to the protruding portion. The boundary portion is a section, or plane that runs at the interface of the two layers.

Art Unit: 1772

Regarding claim 3, it is unclear as to the structure, if any, the process limitations produce. Regarding claims 7 and 21, the portion comprises the boundary where the layers are offset. Regarding claim 16, the second resin layer is laminated to the first resin layer at the protrusion (i.e. portions of the first resin layer as recited). With regards to claim 17, there is a space on the backside of the second resin layer due to the layers being spaced apart between the protrusions.

4. Claims 1, 3, 5-7, 15-17 and 19-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Walsh (4654761).

Walsh discloses a first resin layer 40 laminated to a second resin layer 42. Refer to figures 2, 3, 4 and 6. The second resin layer 42 has protruding portions at bond ends of the layer which attach the layers to one another. The space between the layers can be considered the offset portion since it is adjacent (i.e. next to, or at the side of the protruding portion) to the protruding portion as recited in the claims. As shown by the applicant in figure 3, the offset is adjacent (i.e. to the left and right thereof) to the protruding portion. The boundary portion is a section, or plane, that runs at the interface of the two layers. Regarding claim 3, it is unclear as to the structure, if any, the process limitations produce. Regarding claims 5, 6, 19 and 20, figures 4 and 5 can be used. In this arrangement, 140 can be considered the first layer, which has black portions, and 142 can be considered the second clear layer, which has portions extending toward the first layer due to the wavy structure 184. Also refer to column 4, lines 12-55 and column 6, lines 29-68. Regarding claims 7 and 21, the portion comprises the boundary where the layers are offset. Regarding claim 16, the second resin layer is laminated to the first

Art Unit: 1772

resin layer at the protrusion (i.e. portions of the first resin layer as recited). With regards to claim 17, there is a space on the backside of the second resin layer due to the layers being spaced apart between the protrusions.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

Art Unit: 1772

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

8. Claims 4 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over either Prophet or Walsh.

The primary reference teaches the invention substantially as recited except for the specific degree of offset. See the 35 U.S.C. 102 rejections above.

However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to the primary references to offset (i.e. space) the layers the specific degree motivated by the fact the reference teaches the same type of offset between the protrusions that the applicant discloses, but is silent as to the degree.

#### ***Response to Arguments***

9. Applicant's arguments filed November 13, 2006 have been fully considered but they are not persuasive. The applicant argues that the examiner is misinterpreting, and giving little patentable weight to, the boundary surface in the claims. However, as explained above the boundary portion is a section where the protrusion is laminated to the other layer and the offset portion is just to the left and right thereof (i.e. adjacent thereto). The applicant's claims fail to recite any specific portion of the layers that are laminated which distinguish from the prior art structure. The layers can be laminated at the ends, where the protrusions are, and have one layer that contains portions that protrude towards the other layer and are spaced (i.e. offset) as shown in the prior art.

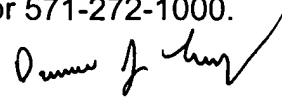
Art Unit: 1772

Again, the examiner is giving the boundary portion, protruding portion and offset limitation the broadest reasonable interpretation with respect to the claims and prior art.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Donald Loney whose telephone number is (571) 272-1493. The examiner can normally be reached on Mon, Tues, Thurs and Fri. 8AM-4PM, flex schedule.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye can be reached on 571 272-3186. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Donald Loney  
Primary Examiner  
Art Unit 1772

DJL:D.Loney  
02/04/07